Query language to mivar representation of relational databases, containing information archive from previous human resources systems

© A.V. Baldin, S.A. Tonoyan, D.V. Eliseev

Bauman Moscow State Technical University, Moscow, 105005, Russia

The article analyzes the processing capabilities of relational databases, consolidated under mivar space, which showed the need to develop query language to such a representation archive of HR information. A scheme of work with mivar view of the relational database is proposed in the article, which allows the use of SQL statements of previous personnel systems. To implement this, the analysis of the SQL query language is performed to define additional operators to enable processing of information stored in a multidimensional mivar space. To interact with RDB multidimensional spaces the operators of processing of multidimensional spaces, special operations related to the definition of the desired state relations relational model, and operators to dynamically generate relations of RDB from mivar space are defined. Proposed mivar approach simplifies the solution of the problem of processing temporal data with variable structure in information systems.

Baldin A.V., Dr. Sci. (Eng.), Director of the Department Scientific Educational Center Electronic University of Bauman Moscow State Technical University. Author of more than 90 publications in the field of information technologies. e-mail: bal@bmstu.ru

Tonoyan S.A., Ph.D., Assoc. Professor of the Information Processing and Control Systems Department of Bauman Moscow State Technical University. Author of more than 25 publications in the field of computer and information technologies. e-mail: tonoyansl@mail.ru

Eliseev D.V., Ph.D., Programmer of the Scientific Educational Center Electronic University Department of Bauman Moscow State Technical University. Author of more than 10 publications in the field of computer and information technologies. e-mail: d-eli@mail.ru